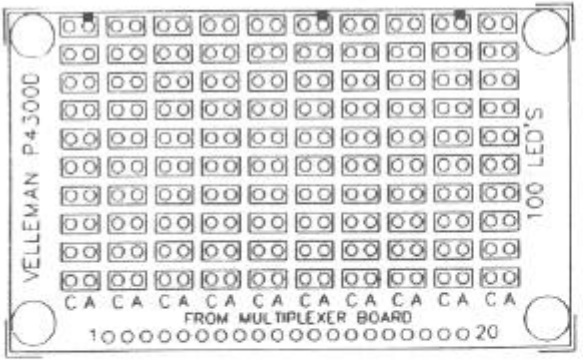
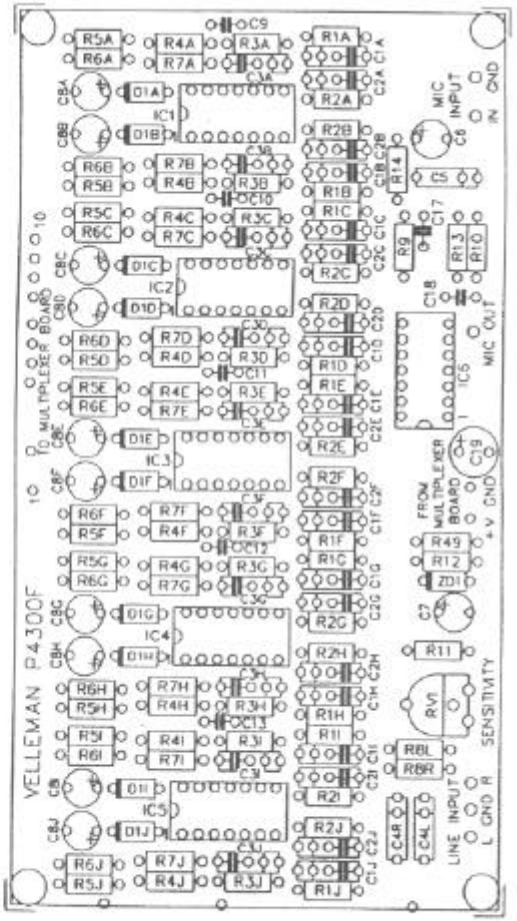
The input signal is connected to the line input (LINE INPUT). Branch the signal there where its level is constant : thus from a tape output or ahead of the volume regulator. On the master module K2664 of the VELLEMAN mixing panel you can branch from the volume potentiometer (the two extreme branches) (to measure the spectrum of the output signal), as well as from the points VU OUT (to obtain the spectrum of the headphone signal). In the case of a mono source, inputs L and R have to be connected to each other.

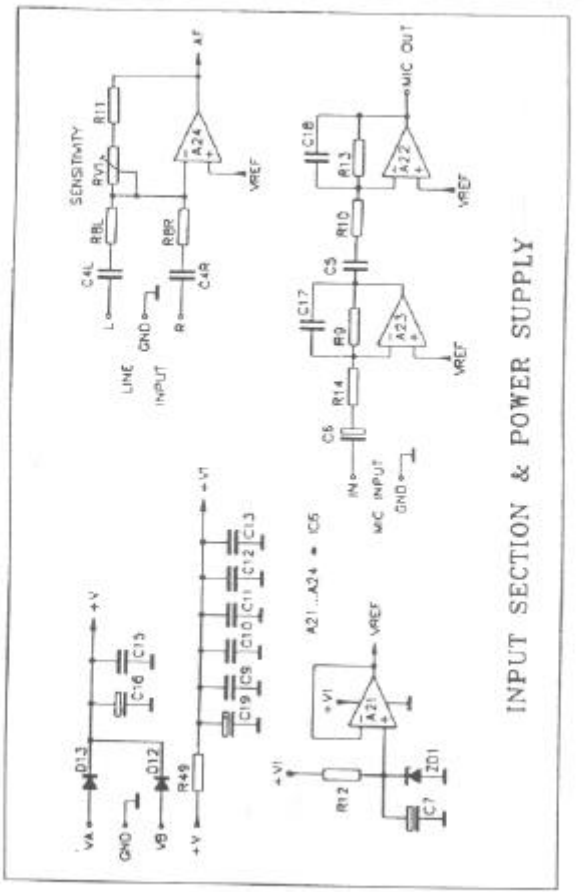
You can also use a normal microphone as a signal source. In this case you must connect MIC OUT to both line inputs. The microphone has to be connected to MIC INPUT (screen to GND). When the microphone input is not used, you better short-circuit it (using a SHORT piece of non-insulated wire).

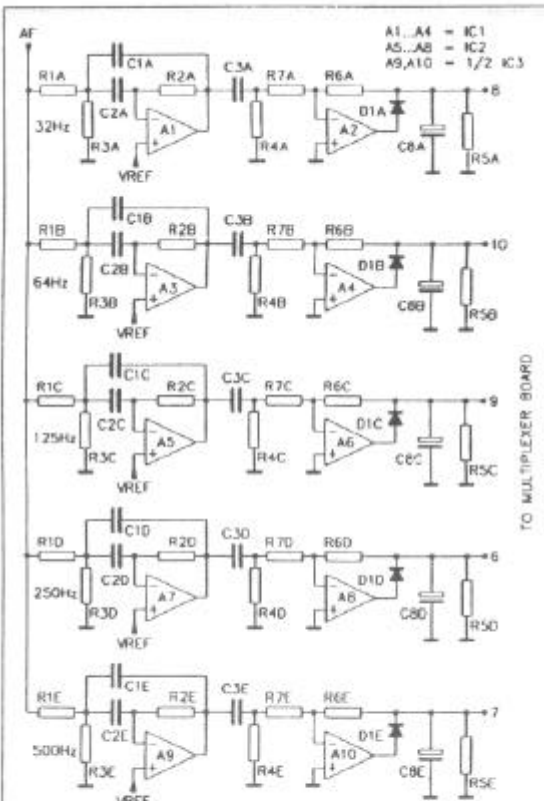
AUDIO SPECTRUM ANALYZER PCB LAYOUT AND COMPONENT PLACEMENT



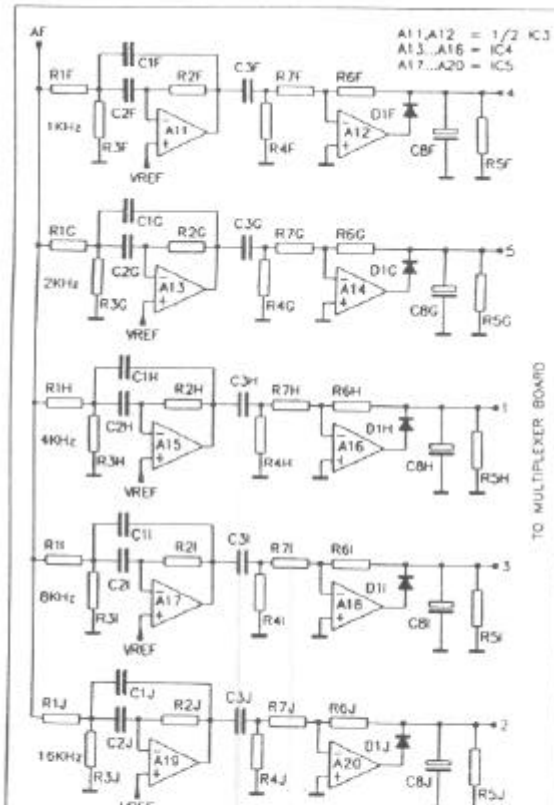


VELLEMAN P4300M
VA
VB
TO FILTER BOARD
+V
GND
GND
C14
C15
C16
D13
D12
D14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R35
R48
R37
R36
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R38
R39
R40
R41
R42
R43
R44
R45
R46
R47
IC11
IC12
IC10
IC9
IC8
IC7
IC13
ZD2
ZD3
ZD4
ZD5
ZD6
ZD7
ZD8
ZD9
ZD10
ZD11
T10
T11
T12
T13
T14
T15
T16
T17
T18
T19
T20
TO DISPLAY BOARD
FROM FILTER BOARD
1
10
20

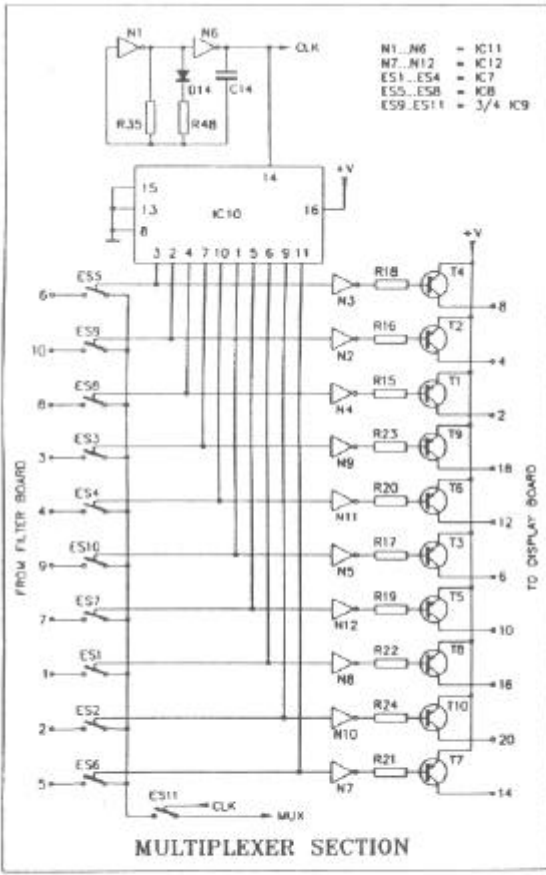

INPUT SECTION & POWER SUPPLY
LINE INPUT
MIC INPUT
SENSITIVITY
A21...A24 = IC6
VREF
GND
AF
MIC OUT



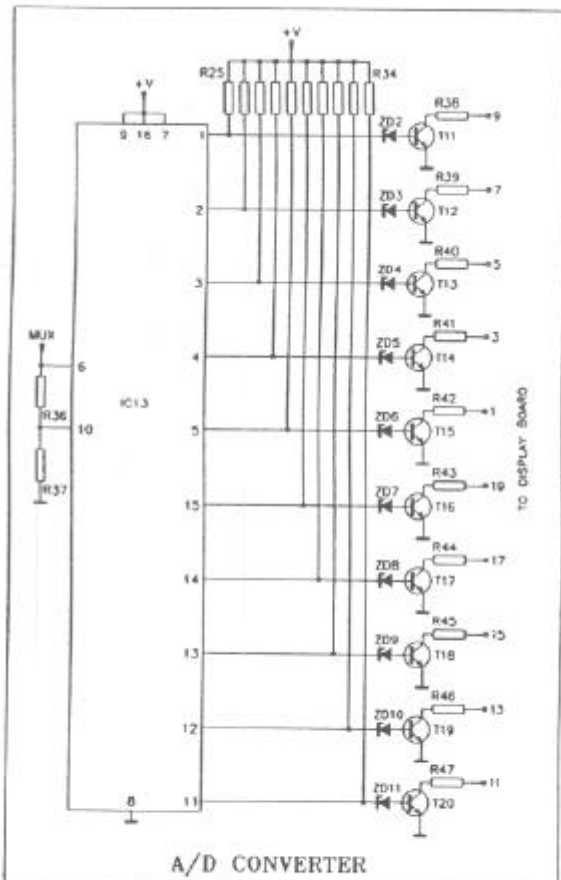
FILTER SECTION A



FILTER SECTION B



MULTIPLEXER SECTION



A/D CONVERTER

DISPLAY SECTION